

Serial No. A  
Attorney Docket No.

Specifically, amended claim 1 recites that the adapter includes "...a second receptacle, first and second openings for receiving the second conductors in position for engaging first conductors of the flexible circuit at the edge of the male body member." Support for this amendment is provided in page 7, lines 17-19, and in page 9, lines 22-23 of the specification.

With regard to the rejection of claim 1 under 35 U.S.C. §102(b), the Applicant respectfully submit that Johnson et al. '968 does not include all of the elements recited in amended claim 1. Specifically, Johnson et al. '968 does not include an adapter having first and second receptacles, the second receptacle having "first and second openings" for receiving first and second conductors, as recited in amended claim 1. The present specification describes such an adapter in FIGS. 1 and 2. However, the prior art does not disclose a printed circuit board having a first opening for receiving a flexible circuit inserted into the back side of the board (specifically top window 44) as shown in FIG. 1. Therefore, the present invention is novel over the prior art.

a male connector including a relatively rigid male body member having an edge about which the flexible circuit is wrapped with the first conductors of the circuit facing away from the body member at the edge thereof; and

a female connecting device including a receptacle for receiving the male connector inserted into the receptacle, and means on the device for positioning said second conductors in engagement with the first conductors of the flexible circuit at the edge of the male body member."

Thus, claim 16 is drafted in "means-plus-function" form. The interpretation of claim language drafted in this form is governed by 35 U.S.C. § 112, sixth paragraph, which reads as follows: "An element in a claim . . . may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." Thus, interpretation of the "means for...positioning" element recited in the claim must be interpreted by reference to the embodiments described in the present specification.

As set forth in the present specification, the "means on the device for positioning said second conductors in engagement with the first conductors" includes an adapter having a second receptacle including first and second openings for receiving the second conductors in position for engaging the first conductors. However, Johnson et al. '968 does not disclose an adapter having first and second receptacles with the second receptacle having first and second openings for receiving a plurality of second conductors, as disclosed in the present specification. Housing 12" of Johnson et al. '968 has only one opening (exit slot 15) for receiving additional conductors in the housing. Thus, as the embodiments disclosed in the present specification include features not shown in Johnson et al. '968, the applicants respectfully submit that claim 16 is not anticipated by Johnson et al. '968.

For the reasons stated above, the Applicants respectfully submit that amended claim 1 is patentable over Johnson et al. '968. As claim 1 is believed to be patentable over the cited reference, it is submitted that claims 2-9 are also patentable as they depend from claim 1.

Also for the reasons stated above, the Applicants respectfully submit that amended claim 16 is patentable over Johnson et al. '968. As claim 16 is believed to be patentable over the cited reference, it is submitted that claims 17-24 are also patentable as they depend from claim 16. In view of the above amendments and remarks, the Applicants respectfully submit that all rejections of record have been overcome. The Applicants respectfully request favorable reconsideration and allowance of the present application.

Respectfully submitted,

MOLEX INCORPORATED

Date: July 15, 2002

By: Stacey E. Caldwell

Stacey E. Caldwell  
Registration No. 36,917  
Attorney of Record

Mailing Address:  
Stacey E. Caldwell  
MOLEX INCORPORATED  
2222 Wellington Court  
Lisle, Illinois 60532  
Tel.: (630) 527-2665  
Fax.: (630) 416-4962

**Version of Amended Specification Showing the Changes Made**

A. Version With Markings To Show Changes Made (Claims)

1. (Amended) A connector assembly for removably interconnecting first conductors of a flat flexible circuit to a plurality of second conductors without the use of conductive terminals, comprising:

a male connector including a relatively rigid male body member having an edge about which the flexible circuit is wrapped with the first conductors of the circuit facing away from the body member at the edge thereof; and an adapter including a first receptacle for receiving the male connector inserted edge-first into the first receptacle, and a second receptacle having first and second openings for receiving the second conductors in position for engaging the first conductors of the flexible circuit at the edge of the male body member.

7. (Amended) In combination with the connector assembly of claim 1, a printed circuit board inserted into the second opening of the second receptacle of the adapter, the printed circuit board having said second conductors engageable with the first conductors of the flexible circuit.

8. (Amended) In combination with the connector assembly of claim 1, including a second flat flexible circuit inserted into the first opening of the second receptacle of the adapter, the second flexible circuit having said second conductors engageable with said first conductors.

9. (Amended) In combination with the connector assembly of claim 1, including a plurality of discrete electrical wires inserted into the second opening of the second receptacle of the adapter, the discrete electrical wires having said second conductors engageable with the first conductors of the flexible circuit.